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Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

In the Matter of

Interconnection and Resale Obligations  
Pertaining to Commercial Mobile  
Radio Services

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CC Docket No. 94-54

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COMMENTS OF AT&T CORP.

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To: The Commission

**COMMENTS OF AT&T CORP.**

AT&T Corp. ("AT&T"), by its attorneys, hereby submits its comments on the Second Notice of Proposed Rule Making<sup>1</sup> in the above-captioned proceeding. AT&T currently provides cellular and messaging service and intends to offer narrowband and broadband personal communications services ("PCS") in the near future.

**Introduction and Summary**

In the Second Notice, the Commission adopts the correct approach to the interconnection, roaming, and resale obligations of providers of commercial mobile radio services ("CMRS"). By not imposing rules on CMRS providers that might be inefficient or constrain market choices, the Commission will give CMRS providers the opportunity to seek

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<sup>1</sup> Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services, Second Notice of Proposed Rule Making, CC Docket No. 94-54, FCC 95-149 (rel. April 20, 1995) ("Second Notice"). The Second Notice is the successor to the Commission's Notice, Equal Access and Interconnection Obligations Pertaining to Commercial Mobile Radio Services, Notice of Proposed Rulemaking and Notice of Inquiry, 9 FCC Rcd. 5408 (1994). On September 19, 1994, AT&T acquired McCaw Cellular Communications, Inc. ("McCaw"). McCaw filed comments on the Notice on September 12, 1994, and AT&T filed reply comments on the Notice on October 13, 1994.

out voluntary, mutually beneficial alliances that are the product of market forces rather than government mandates that would harm both carriers and consumers.

As the Commission has recognized in several different contexts, the CMRS marketplace is currently competitive and is becoming even more robust through, among other factors, the Commission's decision to increase the availability of spectrum for wireless services.<sup>2</sup> Additional competition will come from enhanced specialized mobile radio services ("ESMRs"), which are being consolidated into a nationwide network.<sup>3</sup> Indeed, digital PCS systems and ESMRs will significantly enhance the availability and scope of wireless services. In this competitive marketplace, existing CMRS providers will have additional strong incentives to distinguish themselves from other providers through innovative service offerings and investment in advanced technology.

Unlike local exchange carriers ("LECs"), CMRS providers do not enjoy a monopoly over essential facilities and do not have the incentive or the ability to create substantial barriers to entry. The Commission itself has recognized that existing CMRS providers do not control bottleneck facilities.<sup>4</sup> Because the CMRS marketplace is competitive, the Commission has found that neither tariffing nor entry regulations are necessary to ensure that

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<sup>2</sup> See Second Notice at ¶ 36 ("[a]s a result of our recent spectrum auctions, as well as other developments in the industry, we believed that all commercial mobile radio services will be provided on a competitive basis by multiple facilities-based competitors in each license area in the near future, potentially lessening the need for regulatory intervention").

<sup>3</sup> Implementation of Section 3(n) and 332 of the Communications Act, Regulatory Treatment of Mobile Services, Second Report and Order, 9 FCC Rcd 1411, 1470 (1994) ("CMRS Second Report").

<sup>4</sup> Id. at 1499.

rates are just and nondiscriminatory.<sup>5</sup> Likewise, the Commission recently concluded that state regulation of CMRS rates is not necessary to protect consumers from unjust or unreasonable rates.<sup>6</sup> In its decisions rejecting the states' petitions, the Commission emphasized that it preferred lowering entry barriers to cure market imperfections rather than regulating CMRS licensees.<sup>7</sup>

In view of these findings, concerns that CMRS providers will engage in anticompetitive behavior with regard to CMRS-to-CMRS interconnection, roaming, and resale are speculative at best. The Commission should not allow unfounded fears to motivate it to implement rules that build inefficiencies into the CMRS marketplace. Instead, the Commission should allow CMRS providers to respond to market forces and resolve complaints on a case-by-case basis.

The Commission has taken several significant steps in the Second Notice to conform its interconnection, roaming, and resale policies with its past CMRS policy decisions. First, the Commission has appropriately concluded that under current and foreseeable market conditions, government-mandated CMRS-to-CMRS interconnection requirements are unnecessary to foster competition. Interconnection is readily available to CMRS providers from the LECs, and, because most traffic currently originates and terminates on the public

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<sup>5</sup> Id. at 1478.

<sup>6</sup> See, e.g., Petition of the Connecticut Department of Public Utility Control to Retain Regulatory Control of the Rates of Wholesale Cellular Service Providers in the State of Connecticut, Report and Order, PR Docket No. 94-106, FCC 95-199 (rel. May 19, 1995) ("Connecticut Order").

<sup>7</sup> See, e.g., id. at ¶ 14; Petition of the State of Ohio for Authority To Continue To Regulate Commercial Mobile Radio Services, Report and Order, PR Docket No. 94-109, FCC No. 95-193 (rel. May 19, 1995) at ¶ 14.

switched network, interconnection through the LECs is most efficient. CMRS providers will interconnect with each other if there is sufficient mobile-to-mobile traffic to justify such arrangements. Requiring CMRS providers to enter into interconnection arrangements that are inefficient would impose substantial costs on wireless carriers and customers. Rather, the Commission should afford CMRS providers the maximum flexibility to determine whether and when interconnection agreements with other CMRS providers are appropriate. In addition, because it is impossible to separate the interstate and intrastate aspects of interconnection and a single uniform regulatory scheme is essential, the Commission should preempt state authority over CMRS-to-CMRS interconnection.

Second, the Commission has also correctly concluded that roaming should be the subject of negotiation between CMRS providers rather than government mandate. Commission-mandated roaming standards are unnecessary, especially in light of the industry's development and implementation of the IS-41 standard to provide seamless roaming. CMRS providers have every incentive to develop national seamless wireless infrastructures. Customer demand has and will continue to drive CMRS providers to offer more sophisticated roaming arrangements through internetworking alliances. The Commission cannot anticipate evolving customer needs or the most appropriate standards for meeting them. If the Commission determines that some level of roaming should be mandated, it should limit any such requirement to "manual" roaming.

Third, if the Commission believes that a general resale requirement is necessary to promote competition, it should apply the resale requirement equally to all CMRS providers, except in those situations where resale is technically infeasible. Any other requirement

would thwart competition by placing a regulatory burden on some but not all CMRS providers. The Commission should, however, only require resale where it will further rather than inhibit competition. In this regard, the Commission should limit to 18 months the obligation of a CMRS provider to resell to its facilities-based competitors.

Finally, the Commission has properly rejected the cellular resellers' proposal to require facilities-based cellular licensees to "unbundle" their networks. Given the competitiveness of the CMRS marketplace, there is no merit to the resellers' proposal. Moreover, the resellers' switch proposal suffers from a myriad of technical and other difficulties, and it would impose significant costs on subscribers and carriers and create price distortions that would subsidize resellers. Given the ease of entry into the CMRS marketplace, resellers can become facilities-based providers if they wish to offer facilities-based services.

**I. The Imposition Of CMRS-to-CMRS Interconnection Obligations is Unnecessary and Would Impede CMRS Competition**

The Commission has correctly concluded that it is premature to adopt CMRS-to-CMRS interconnection obligations.<sup>8</sup> Unlike LECs that are subject to interconnection obligations, CMRS providers enjoy neither monopoly control over essential facilities nor a degree of market power that would give them the incentive and ability to create substantial barriers to entry.

For the foreseeable future, interconnection through the LECs will remain the most technically and economically efficient means of routing calls between mobile networks.

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<sup>8</sup> Second Notice at ¶ 29.

Interconnection between CMRS providers is not necessary because CMRS providers may presently interconnect through the public switched network. To the extent that there is sufficient mobile-to-mobile traffic to justify direct connections between CMRS providers, those connections will benefit both carriers involved and will occur without regulation. On the other hand, the imposition of interconnection requirements will constrain technology and market choices.

Even in the absence of mandatory interconnection obligations, CMRS providers remain subject to ongoing oversight by the Commission. They may not unreasonably discriminate between entities seeking interconnection, and aggrieved parties may seek redress through the Commission's complaint procedures if they believe they have been wrongly denied interconnection. The availability of these protections renders specific federal and state CMRS interconnection requirements unnecessary.

**A. CMRS Providers Do Not Have the Market Power to Create Substantial Barriers to Entry**

The imposition of interconnection requirements can only be justified by the presence of sustained market power or by evidence of a market weakness that will induce competitors to deny interconnection where it is otherwise economically efficient. There is no evidence that the CMRS marketplace suffers from either defect. Given the rapidly expanding and changing relevant product and geographic markets for mobile telecommunications services, including the impending entry of new providers, there is no basis for imposing interconnection obligations on cellular systems or other CMRS providers.<sup>9</sup> As the

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<sup>9</sup> The Commission has acknowledged elsewhere that imposition of interconnection requirements is unnecessary in the absence of essential facilities or market power sufficient to



Commission has held, there is sufficient competition among cellular providers to warrant forbearance from other requirements traditionally applied to non-competitive markets.<sup>10</sup>

Notwithstanding the Commission's determination not to impose interconnection requirements on CMRS providers at this time, the Commission has raised concerns that there is the potential for anticompetitive behavior by CMRS providers with large market shares who might attempt to raise their rivals' costs or by CMRS providers affiliated with LECs. In connection with these concerns, the Commission has expressed its intent to use market power as its touchstone for determining whether to impose specific interconnection obligations and seeks comment on whether identification of the relevant product and geographic markets is necessary.<sup>11</sup> Regardless of the relevant product and geographic market the Commission chooses, in no instance can it find that any CMRS provider has sufficient market power to warrant the imposition of interconnection obligations. In view of the Commission's findings regarding current and reasonably foreseeable competitive conditions in the CMRS marketplace, there is no need for it to engage in a detailed analysis of the relevant product and geographic market at this time.

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thwart competition. See Expanded Interconnection with Local Telephone Company Facilities, 9 FCC Rcd. 5154, 5184 (1994) (market forces can be relied upon to induce non-dominant carriers to provide interconnection in response to demand; it is unnecessary to place interconnection obligations upon parties that lack market power and do not control bottleneck facilities).

<sup>10</sup> CMRS Second Report, 9 FCC Rcd at 1470, 1478-79.

<sup>11</sup> Second Notice at ¶ 41.

1. Determination of relevant product and geographic markets is unnecessary at this time.

The Commission seeks comment on whether it must first determine which services are included in the relevant product and geographic markets in order to evaluate whether CMRS providers have market power.<sup>12</sup> Such a detailed examination of the relevant product and geographic markets is unnecessary to support the Commission's tentative conclusions in this proceeding. Any market analysis that the Commission engages in will demonstrate that the CMRS market is sufficiently competitive to protect against the use of the denial of interconnection as an anticompetitive tool.

The CMRS product and geographic markets today are broad and rapidly expanding. As more and more services become available to consumers, the number of substitutable services will increase. Likewise, as service areas become larger due to technical advancements, the area in which providers will compete will expand. It would be purely speculative to engage in product or geographic market analysis at this time. Even assuming that CMRS providers could exert market power in the relevant product and geographic markets, the presence of at least two such providers in each market would require collusion between or among them in order to ensure that competitors were denied access to the "bottleneck." Such a collusive arrangement is unlikely because it would be relatively easy to detect. Available evidence on market performance, moreover, suggests that CMRS providers behave competitively rather than acting in concert<sup>13</sup>

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<sup>12</sup> Id. at ¶ 33.

<sup>13</sup> See Declaration of Bruce M. Owen attached as Exhibit 1 at ¶ 26.

Any attempt to define the relevant product market should be guided by a few fundamental principles.<sup>14</sup> First, CMRS providers compete both to originate and terminate calls.<sup>15</sup> There is no separate competition for the origination and the termination of calls. CMRS providers do not market such services separately, and consumers would not purchase them separately. The Commission should therefore not attempt to separate them for purposes of defining the market.

Second, the Commission must also take into account the fact that services are not necessarily substitutable based on a price comparison.<sup>16</sup> There may be significant non-price similarities between services that make them close substitutes. For instance, CMRS and coin-operated telephones may be in the same product market because they suit the needs of mobile consumers, but consumers may pay different rates for calls made from CMRS telephones and coin-operated telephones.

Against the backdrop of these principles, it is possible to identify a number of potentially relevant product markets. For example, the relevant product market could be all CMRS services, or perhaps some combination of mobile telecommunications services, wireless data transmission services, and paging services. The Commission might also consider the mobile telecommunications services market alone, which could include all

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<sup>14</sup> The Commission should examine the set of services that consumers would consider acceptable substitutes if prices for products within the market were increased. Id. at ¶ 34. Close substitutes are those services to which customers would switch if the price of a particular service were to rise. Id. at ¶ 39.

<sup>15</sup> See id. at ¶ 37.

<sup>16</sup> Id. at ¶ 40.

cellular-like services offered in the next three to five years.<sup>17</sup> Cellular service, other CMRS service, and landline services may sometime in the future all compete in the same market. Because local landline telephone service is generally priced below cost, however, local landline telephone service does not currently compete in the same market as CMRS.

Because of the different geographic areas that CMRS providers serve, the relevant geographic market is also difficult to determine. For instance, cellular providers do not cover the same service areas as PCS providers. Cellular carriers provide service to Metropolitan Statistical Areas (“MSAs”) and Rural Service Areas (“RSAs”). PCS providers will be required to provide service to Metropolitan Trading Areas (“MTAs”) and Basic Trading Areas (“BTAs”). These areas are not coterminous, and it would therefore be difficult to determine whether a CMRS provider was leveraging market power if it denied interconnection.<sup>18</sup>

Regardless of the product or geographic market that the Commission chooses, in no case will the Commission find that any CMRS provider has the kind of market power that would justify the imposition of interconnection obligations.<sup>19</sup> Rather than engaging in such abstract and speculative analysis of the CMRS marketplace, the Commission should review questions of relevant product and geographic market in the context of specific complaints.

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<sup>17</sup> Id. at ¶ 47. The Commission should find that the mobile voice market is too narrow. For example, in many cases voice and e-mail are likely to be close substitutes for buyers, and voice and data paging systems are likely to be close substitutes for other buyers. Id. at ¶ 46.

<sup>18</sup> The Commission might determine the relevant geographic market by examining the extent of feasible geographic price discrimination. Id. at ¶ 51.

<sup>19</sup> Id. at ¶¶ 42-43.

Under an antitrust analysis, each market is considered on the specific facts of the case. Such case-specific review would enable the Commission's decisions to reflect the evolving nature of the CMRS marketplace.

2. The Commission's raising rivals' cost theory has several flaws.

The Commission's concern that some CMRS providers might attempt to raise their rivals' costs by denying those CMRS providers interconnection is unwarranted from the perspective of the rational CMRS market participant. If some CMRS providers attempt to deny otherwise efficient interconnection, other CMRS providers will find alternative ways to route their traffic to overcome the anticompetitive behavior of their CMRS competitor. In the process, the CMRS providers denying interconnection are likely to raise their own costs by denying efficient interconnection and will receive no compensating benefits in return. Such a strategy would not be profitable in the long term, and it is unlikely that a CMRS provider would pursue it.<sup>20</sup>

Without mandated CMRS-to-CMRS interconnection, CMRS providers may still obtain interconnection from other sources. Interconnection through the LEC, which is crucial to the viability of CMRS providers because it ensures access to the public switched network, will remain an option. No CMRS provider can therefore exclude any other CMRS provider from the marketplace by denying CMRS-to-CMRS interconnection. If efficient, interconnection will also be available from CMRS providers other than the CMRS provider denying interconnection. Meanwhile, the CMRS provider's profits would be reduced because subscribers would shift to the more efficient CMRS providers and because the number of

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<sup>20</sup> Id. at ¶¶ 18-27.

calls per subscriber would decline if the anticompetitive CMRS provider attempted to raise its prices to cover the higher cost of calls to other CMRS providers.<sup>21</sup>

Even if a CMRS provider could deny efficient interconnection and could raise another CMRS provider's cost without consequently injuring itself, there is no evidence that the amount that the costs of the provider denied interconnection would be raised significantly as a result. A CMRS provider's denial of interconnection would raise the costs of a CMRS provider requesting interconnection only as much as the difference between the cost of routing calls through the LEC and the cost of routing calls through the CMRS provider.<sup>22</sup> This difference is likely to be small.<sup>23</sup> Because most calls currently originate and terminate on the landline network, direct CMRS-to-CMRS interconnection only can be efficient when there is sufficient traffic between CMRS providers to warrant the additional trunking, port charges, and operational expenses associated with establishing direct connection.<sup>24</sup> It is therefore unlikely that CMRS-to-CMRS interconnection would be efficient enough that a CMRS provider could raise costs to the degree necessary to injure its competitors.

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<sup>21</sup> Id. at ¶ 22. The higher cost of calls would be due to the fact that the CMRS provider denying interconnection would not be benefiting from lower interconnection charges for calls it terminated on another CMRS provider's network.

<sup>22</sup> Id. at ¶ 20.

<sup>23</sup> See Declaration of Kurt C. Maass attached as Exhibit 2 at ¶ 7.

<sup>24</sup> Id. at ¶ 10 (it is unlikely that a CMRS provider could raise a rival's cost by as much as even 0.5%).

**B. Carriers Will Enter Into CMRS-to-CMRS Interconnection Agreements Where Such Interconnection Is Efficient**

In view of the fact that CMRS providers do not have the ability or incentive to deny interconnection for anticompetitive purposes, CMRS providers can be expected to interconnect with other CMRS providers when it is efficient for them to do so. Interconnection increases the demand for a provider's services; if one CMRS provider fails to interconnect, other providers will gain competitive advantages from doing so.<sup>25</sup>

This expectation is borne out by AT&T's cellular experience. In most cases, AT&T and other wireless carriers interconnect solely through the LEC switch. In some markets, however, AT&T has found that there is sufficient traffic between its network and the other cellular system to justify direct interconnection with that system. Direct connection provides route redundancy in the event of abnormally high traffic loading in the LEC switch or in the case of man-made or natural disasters where the landline network is temporarily disabled. Direct connection also reduces costs by eliminating the need to obtain and pay for LEC switching capability.

AT&T decides whether and when to connect directly with another wireless provider by determining the amount of traffic destined for the other provider and using this information to ascertain the number of trunks necessary to support peak busy hour traffic. If it is more economical to route those calls through direct connection rather than through the LEC, AT&T negotiates such an arrangement. Because direct connection is also more

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<sup>25</sup> CMRS-to-CMRS interconnection should not be deemed the norm from which deviations must be justified. Unless there is substantial mobile-to-mobile traffic, direct connection between mobile networks is not the most efficient form of interconnection.

economical for the other provider under these circumstances, AT&T has reached mutually acceptable interconnection agreements with other providers despite the considerable complexities associated with such arrangements.<sup>26</sup>

Negotiating direct interconnection arrangements requires resolution of a wide range of factors that would be difficult to establish by regulation. Among these factors are traffic engineering; type of connection; signaling format; physical design; administration; and alternate routing plans.<sup>27</sup> There are substantial difficulties that can arise from substituting government mandates for marketplace negotiations.

Even though CMRS-to-CMRS interconnection is cost-effective in some circumstances, CMRS interconnection through the LEC will continue to be the most efficient form of interconnection for the foreseeable future. Most traffic carried by a mobile services provider will either originate or terminate on the landline network. As AT&T's cellular experience demonstrates, direct connection arrangements become efficient only where there is sufficient mobile-to-mobile traffic to justify the costs of such arrangements. Even in instances where CMRS-to-CMRS interconnection may appear more efficient, this may be true only because LEC interconnection prices are above cost.

Mandating CMRS-to-CMRS interconnection will not introduce competition into the market for interconnection; in fact, the contrary is true. Competition generally drives prices toward cost, but only when entry is efficient in the first instance. A requirement for CMRS-

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<sup>26</sup> Maass Declaration at ¶ 7.

<sup>27</sup> See Declaration of Roderick Nelson attached as Exhibit 3 to Comments of McCaw, ¶ 6 (Sept. 19, 1994).



to-CMRS interconnection will not resolve the problems posed by the local bottleneck, but would instead build more inefficiencies into the marketplace. If the Commission believes that LEC interconnection prices are above cost, it should examine those prices and lower them rather than force inefficiencies on a competitive market by mandating CMRS-to-CMRS interconnection.

Even in the absence of mandatory interconnection obligations, CMRS providers remain subject to ongoing oversight by the Commission. CMRS providers may not, for instance, unreasonably discriminate among entities seeking interconnection.<sup>28</sup> In the rare instance where a denial of interconnection is not justified on the basis of economic or technological efficiency, the aggrieved party will have recourse to the complaint process under Section 208 of the Communications Act.<sup>29</sup> In extreme cases, the antitrust laws remain available as an avenue of redress. In no case, however, is there a justification for the imposition of government-mandated interconnection obligations on CMRS providers. Such obligations would carry substantial costs without conferring any corresponding public benefits.<sup>30</sup> Contrary to the Commission's conclusion that an increasing number of

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<sup>28</sup> 47 U.S.C. § 202. Section 332(c)(1)(A) of the Act, 47 U.S.C. § 332(c)(1)(A) expressly denies the Commission the authority to exempt CMRS providers from sections 201, 202, and 208 of the Communications Act.

<sup>29</sup> 47 U.S.C. § 208. The continuing availability of the nondiscrimination requirement and the complaint process contributed to the Commission's conclusion that it could forbear from applying tariffing requirements to CMRS providers. See CMRS Second Report, 9 FCC Rcd at 1478-80.

<sup>30</sup> The Commission should, of course, take precautions to avoid the anticompetitive abuse of its processes. Competitors should not be permitted to engage CMRS providers in protracted complaint proceedings based on frivolous claims in an attempt to obtain unreasonably low interconnection rates.

complaints would suggest that general interconnection rules might be necessary, a high incidence of complaints might only indicate that complainants have found it profitable to use the administrative process to obtain deals they might not be able to obtain in the competitive market.

**C. The Imposition of CMRS-to-CMRS Interconnection Will Impose Unnecessary Costs on CMRS Providers and Subscribers**

In addition to yielding no benefits, a policy of mandatory interconnection is likely to impose substantial costs on CMRS providers and subscribers. First, mandated interconnection would limit technological development. It is also likely to deter new investments, quality improvements, introduction of new services, and entry by raising costs and reducing returns for procompetitive activities.<sup>31</sup> Requiring the provision of inefficient interconnection would confer a disproportionate benefit on resellers and other CMRS providers who could obtain interconnection at artificially low prices. Both to avoid lengthy proceedings and as a result of such proceedings, CMRS providers would be induced to provide interconnection even where it is not worthwhile.

**1. Government-mandated CMRS interconnection would constrain technology.**

Requiring direct connections when they otherwise would not be efficient would impede technological progress and innovation by exerting a drag on a CMRS provider's ability to introduce new equipment or services. For instance, AT&T has aggressively pursued new technologies such as SS7 in its interconnection arrangements. Additionally, AT&T is converting its interconnections with LECs to SS7 and will pursue the same with

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<sup>31</sup> Owen Declaration at ¶ 11.

other wireless carriers. The imposition of mandated terms, conditions, prices, and configurations for interconnections would introduce a significant time lag in AT&T's introduction of advanced technology for interconnection while the technology was studied by regulators and subjected to public comment. Neither AT&T, its customers, nor the public at large would benefit from this unnecessary delay in the introduction of technological innovation.

Similarly, a CMRS provider seeking to introduce a new switch or network architecture would be unable to do so if interconnecting carriers' facilities are incompatible with the new technology. The innovating provider would have to wait until all carriers were prepared to upgrade or replace their equipment, or maintain two regimes in order to introduce the new technology prior to that point. In effect, government-mandated interconnection could freeze technology at the level of the lowest common denominator. At a minimum, it could severely hamper the ability of CMRS providers to deploy advanced facilities that might obsolesce the networks of interconnecting carriers. Such a result would not only burden the CMRS provider, it would disserve the public by delaying or reducing the benefits of innovation.

Interconnection rules also are not necessary to bring about technical industry interconnection standards. Cellular carriers voluntarily developed the IS-41 roaming standard, and the market can reasonably be expected to yield analogous standards to enable CMRS providers to interconnect. Government-mandated interconnection would force some CMRS providers to take a higher standard of interconnection than they need, while others

might not be able to obtain the interconnection standards necessary to meet their needs. Such standards are better left to the marketplace to determine.

2. Price distortion would result from mandated CMRS-to-CMRS interconnection.

The introduction of an interconnection mandate might also invite parties to have the Commission regulate the price of interconnection.<sup>32</sup> If a CMRS provider is forced to provide interconnection when it would not be efficient to do so, negotiations over price would be difficult and the disappointed party might seek regulatory intervention. As the Commission well knows, price regulation limits the ability of regulated firms to respond to changes in technology, costs, and demand, thereby deterring new investments, improvements in quality, the introduction of new services, and the entry of competitors. Such regulation, especially when imposed solely on cellular carriers, deprives them of the flexibility they need to respond to new entrants in the CMRS marketplace. The distorting effects of price regulation are likely to be greatest in industries such as CMRS that are characterized by rapid growth, technological change, and relatively high risk.<sup>33</sup>

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<sup>32</sup> Prior to the Commission's decision to preempt the states' petitions to regulate CMRS rates, several states had established price controls. For instance, when the California Public Utility Commission ("CPUC") recently directed cellular carriers to "unbundle" their networks, it established a price cap scheme to determine the rates for particular service elements. Investigation of the Commission's Own Motion into Mobile Telephone Service and Wireless Communications, Decision 94-08-022 (Aug. 3, 1994). The Commission has since preempted CPUC rate regulation. See Petition of the People of the State of California and the Public Utilities Commission of the State of California To Retain Regulatory Authority over Intrastate Cellular Service Rates, Report and Order, PR Docket No. 94-105, FCC 95-195 (rel. May 19, 1995) ("California Order").

<sup>33</sup> Owen Declaration ¶ 11.

The adoption of price regulation for CMRS providers, which generally have not been subject to such regulation, would also impose expensive and time-consuming cost allocation and jurisdictional separations requirements on them. No cost allocation or separations procedures or studies have been conducted by these providers, and their rates have been established on the basis of market determinations rather than government-set formulas.<sup>34</sup> Under these circumstances, the rates for interconnection would reflect artificially-established "costs" that would encourage the kind of inefficiencies described above. The Commission has correctly held that price regulation of mobile services is not necessary or desirable.<sup>35</sup> In the absence of any justification for interconnection obligations, there is no rational basis for introducing such regulation now.

Far from promoting the development of a robust telecommunications infrastructure, burdening wireless carriers with an unnecessary interconnection obligation will significantly reduce their incentives to deploy new facilities by giving third parties an entitlement to cherry-pick the most desirable of those facilities. Deprived of the competitive edge that such

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<sup>34</sup> The principal costs associated with direct interconnection facilities are (1) lease costs for the copper or fiber facility; (2) operations, administration and maintenance costs; and (3) port costs on switches to make the connections. These costs can be shared or recovered in any number of ways; each of these costs conceivably could be recovered using a different formula, adding to the complexity of any rate regulation scheme. One formula may make sense for small carriers or when traffic volumes are relatively low, while another formula would make sense for bigger carriers. For instance, expressing costs per minute might be good for small carriers or relatively low traffic volumes, while sharing recurring costs on a fixed basis might be preferable in the case of larger carriers or higher traffic volumes.

<sup>35</sup> CMRS Second Report, 9 FCC Rcd at 1478-81.

technological advances would confer, wireless carriers would have little incentive to make the significant investments necessary to bring such advances to market.<sup>36</sup>

**D. The Commission Should Preempt the States from Regulating CMRS-to-CMRS Interconnection**

The Commission seeks additional comment on whether it should preempt states from imposing interconnection obligations on CMRS providers.<sup>37</sup> As AT&T and McCaw argued in their comments on the Notice, the Commission should preempt state regulations imposing CMRS-to-CMRS interconnection obligations as well as state-imposed requirements that CMRS providers "unbundle" their networks.<sup>38</sup> Section 332(c)(3)(A) already preempts state regulation of interconnection rates, including the rates for intrastate interconnection.<sup>39</sup>

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<sup>36</sup> The operational and technical costs associated with imposing interconnection obligations on CMRS providers will frustrate competition by requiring CMRS providers to concentrate their efforts on interconnection rather than expending resources on research and development of new services and designing efficiency into existing systems.

<sup>37</sup> Second Notice at ¶ 44. The Commission recognizes that it also raised this issue in its Notice.

<sup>38</sup> Comments of McCaw at 18; Reply Comments of AT&T at 13.

<sup>39</sup> CMRS Second Report, 9 FCC Rcd at 1500. The statutory preemption of state rate regulation is unconditional. See 47 U.S.C. § 332(c)(3). Indeed, "Congress has explicitly amended the Communications Act to preempt state and local rate and entry regulation of commercial mobile radio services without regard to Section 2(b)" of the Communications Act. Id. at 1506. The statutory language of Section 332(c) evidences a "clear intention" to preempt state rate regulation. Cf. Louisiana Public Service Comm'n v. FCC, 476 U.S. 355, 368 (1986). That intention is buttressed by the legislative history of the provision. See House Report at 260; Conference Report at 494. If the Commission determines that interconnection obligations are unnecessary, it should preclude the states from adopting their own interconnection obligations. Under those circumstances, the states would have no intrastate interconnection rates to regulate.

The Commission recently denied several states' petitions to regulate CMRS rates.<sup>40</sup> In the course of rejecting these state petitions, the Commission found that the existence of perfect competition is not required in order to preempt state regulation.<sup>41</sup> The Commission emphasized its belief that Congress had intended in Section 332(c) of the Act to create a national policy for CMRS instead of one balkanized state-by-state.<sup>42</sup> Preemption of state-imposed interconnection requirements is necessary to ensure that the states do not subvert the Commission's efforts to establish a uniform interconnection policy. For the reasons set forth above, that policy should rely on the market to promote the most efficient interconnection arrangements.

Regardless of the interconnection policy ultimately adopted by the Commission, however, state regulation of CMRS interconnection is fundamentally inconsistent with the goal of a seamless national wireless infrastructure. Due to the mobile nature of CMRS traffic, calls that are intrastate one moment may become interstate the next; as a practical matter, it would be impossible to sever the interstate and intrastate elements of interconnection. State-imposed interconnection requirements could nullify the federal policy of relying on the marketplace to determine interconnection arrangements.

The recognition of mobile telephone units, the assignment of frequencies, the supervision of call "hand-offs," and the routing of calls are integral components of a CMRS

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<sup>40</sup> See, e.g., Connecticut Order; California Order; Petition of New York State Public Service Commission To Extend Rate Regulation, Report and Order, PR Docket No. 94-108, FCC No. 95-192 (rel. May 19, 1995).

<sup>41</sup> See, e.g., Connecticut Order at ¶ 17.

<sup>42</sup> Id. at ¶ 14.

network. The imposition of state interconnection policies requiring interconnection with CMRS facilities or the unbundling of these and other CMRS network functions would effectively negate nationwide CMRS service by forcing CMRS providers to engineer and construct state-specific CMRS facilities. AT&T's cellular networks have evolved to a point where "local" systems are now served by centralized signaling hubs that support multi-state regions. One can expect that similar network architectures will be common among PCS and ESMR operators. Carriers utilizing such regional architecture could discover that compliance with a multitude of state interconnection and unbundling requirements would be cost-prohibitive. At a minimum, compliance with state interconnection requirements would undermine technological innovation by diverting CMRS resources to the re-engineering of existing network architectures.

Preemption in this instance is fully consistent with the Commission's long-standing assertion of plenary authority over the nature and scope of interconnection obligations in the mobile services.<sup>43</sup> Mobile services, by their nature, "operate without regard to state lines as an integral part of the national telecommunications infrastructure."<sup>44</sup> The Commission should clarify that states are barred from adopting such requirements<sup>45</sup> because state

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<sup>43</sup> The Need to Promote Competition and Efficient Use of Spectrum for Radio Common Carrier Services, Declaratory Ruling, 2 FCC Rcd. 2910, 2912-13 (1987) ("Interconnection Order").

<sup>44</sup> House Report at 260.

<sup>45</sup> At least one state has adopted a policy to impose unbundling requirements on CMRS providers to facilitate interconnection with those providers. Investigation on the Commission's Own Motion into Mobile Telephone Service and Wireless Communications, CPUC Decision 94-08-22 (Aug. 3, 1994). The California Public Utilities Commission has required cellular carriers to unbundle the "radio portion" of their service, *id.* at 75, and subject such carriers to cost-based rate regulation. *Id.* at 69-70. This proceeding, which was



interconnection requirements would frustrate the federal interest in national mobile service.<sup>46</sup>

## **II. Roaming Services Will Best Develop Through Market Alliances**

The Commission correctly notes that with regard to the availability and pricing of roaming service, “all CMRS providers will respond by implementing nationwide seamless roaming networks and by offering roaming service to interested subscribers.”<sup>47</sup> As in the case of CMRS-to-CMRS interconnection, CMRS competitors have a strong, simple incentive to enter into roaming agreements when they are mutually beneficial: they will lose roaming revenues if they do not. CMRS providers therefore have every motivation without government mandate to develop feature-rich roaming capabilities that will support a national seamless wireless infrastructure. Even the smallest rural CMRS providers will pursue roaming alliances because they will have the benefit of receiving revenues from proportionately greater numbers of roaming customers from the larger CMRS providers. Likewise, large CMRS providers will not shun smaller companies because in many cases roaming on the smaller company’s system will be necessary to fill gaps in nationwide coverage. Consequently, roaming capability is in every CMRS provider’s interest.

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initiated after the enactment of new Section 332, is only the latest manifestation of California’s efforts to impose interconnection obligations on cellular carriers. See Re-Regulation of Cellular Radiotelephone Utilities, 36 Cal.P.U.C.2d 464 (1990).

<sup>46</sup> See 47 U.S.C. § 332(c)(1)(B); House Report at 261. Even with respect to rates for LEC-to-CMRS interconnection, over which the Commission has conceded state jurisdiction, the Commission has stated its intention to preempt intrastate interconnection rates when they interfere with federal policy. See CMRS Second Report, 9 FCC Rcd. at 1497; Interconnection Order, 2 FCC Rcd. at 2913.

<sup>47</sup> Second Notice at ¶ 56.